

AIR FORCE MATERIEL COMMAND  
**LEADING  
EDGE**

November 2002

# AFMC People

Our unique  
family  
portrait



*"From scientists and engineers  
in the research laboratories to  
test pilots and navigators flying  
over the desert, from maintenance  
workers at the air logistics centers  
to medical personnel working in  
aerospace medicine and all the  
civilian employees, contractors  
and family members supporting them,  
Air Force Materiel Command  
is full of unsung heroes."*

Gen. Lester Lyles  
AFMC Commander



# LEADING EDGE

Headquarters  
Air Force Materiel Command  
Wright-Patterson Air Force Base,  
Ohio

Commander  
Gen. Lester Lyles

Director of Public Affairs  
Col. Donna Pastor

Chief, Internal Communications  
Capt. Dave Smith

Executive Editor  
Ms. Libby VanHook

Managing Editor  
Ms. Estella Holmes

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## Cover stories

### 4 — 18 AFMC People: Our unique family portrait



Cover illustration by Ms. Sarah Anne Carter and Ms. Libby VanHook, AFMC Public Affairs.

**T**hey come in all sizes and colors, young and old, retired or just beginning their careers in the Air Force Materiel Command. They take care of their families, pursue outside interests and, in some cases, overcome obstacles that would bring others to their knees. In this issue, we highlight a few of the many talented people who make up the AFMC family.

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Participants in the Wright Scholar program worked closely with Air Force Research Laboratory scientists and engineers for 10 weeks of hands-on exploration designed to foster learning. Read all about it on page 24.



### Snow job

EGLIN AIR FORCE BASE, Fla. — An F/A-22 Raptor spends time in sub-zero temperatures during testing at the McKinley Climatic Laboratory here.

The lab has been conducting climatic tests since 1947. Some of the conditions simulated in the lab include scorching sunlight, rain, sleet and snow, day or night, humid or dry, plus temperature ranges from negative 70 degrees to plus 180 degrees Fahrenheit. (Photo by 2nd Lt. Albert Bosco)

— Reported by AAC Public Affairs

### AEDC upgrades facility increasing test capability

ARNOLD AIR FORCE BASE, Tenn. — The Arnold Engineering Development Center has awarded a \$10.4 million contract to Cadell Construction Inc. for upgrades that will provide one-stop shopping for aerodynamic and propulsion test customers.

The military construction project to the center's aerodynamic and propulsion test unit will provide one-stop shopping for flight speeds from subsonic to Mach 8 for aerodynamic and propulsion test customers.

The project includes installation of a new high-temperature and high-pressure burner to increase test simulation capabilities with air pressures up to 2,800 pounds per square inch and temperatures up to 4,240 degrees Fahrenheit.

It will also support other types of testing besides air-breathing propulsion system tests.

The project also calls for adding an improved air ejector system to allow the test unit to simulate higher altitude conditions while minimizing air usage. Installation of the high-pressure air storage tanks and new liquid oxygen and isobutane systems are also included in the effort.

The Army Corps of Engineers will oversee construction throughout the project. The target completion date for the

Army Corp of Engineers is spring 2004.  
— Reported by AEDC Public Affairs

### Air Force CV-22 resumes flight testing at Edwards

EDWARDS AIR FORCE BASE, Calif. — The Air Force's CV-22 tiltrotor aircraft recently resumed flight tests in the skies over Edwards. The aircraft's successful return to flight comes after meeting the recommendations of several independent investigations and military review panels.

All CV-22 flight tests were halted after a December 2000 crash of a Marine MV-22 Osprey grounded the entire V-22 fleet. This resulted in a series of reviews, including the Defense Department's blue ribbon panel of defense and industry experts.

Since then, a diverse team of engineers, pilots, maintainers and program officials from Naval Air Systems Command, Air Force Special Operations Command and the V-22 integrated test teams, along with contractors Bell, Boeing and Rolls Royce, have been working together to restructure the V-22 program, bringing it in line with the defense and industry recommendations.

The return to flight and subsequent flight testing will assist senior defense leaders in making a final determination about the system's viability and procurement.

— Reported by AFFTC Public Affairs

### AF approves production of laser-based jammer

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Experts at the large aircraft infrared countermeasures program, or LAIRCM, here recently got the green light for system low-rate initial production and are targeting early 2004 to deliver the first laser-protected transport to Air Mobility Command.

The production decision, made after extensive laser and live-fire tests conducted earlier this year, gives Aeronautical Systems Center officials the green light to buy the first four LAIRCM production ship sets, with an additional nine systems scheduled for purchase in 2003. AMC officials have asked the special program office experts to equip enough transports to support one small-scale contingency, a total of 79 aircraft, and hopes for more in the future.

The countermeasures system will be attached to slower-moving cargo aircraft to autonomously detect, track and jam infrared threat missiles targeting them. Its delivery will fill "an urgent and compelling need," according to Lt. Gen. John Baker, AMC vice commander.

LAIRCM is an active countermeasure that defeats the threat missile guidance system by directing a high-intensity modulated laser beam into the missile seeker.

— Reported by ASC Public Affairs

# Tele-wedding: The next best thing to being there

When Ms. Lakisha Tennison and Airman 1st Class Christopher Osby of the 78th Services Division at Robins Air Force Base, Ga., woke up April 11, they prepared themselves for the biggest day of their lives — their wedding day.

Ms. Tennison awoke early, adorned herself in wedding attire, and soon was on her way to say I do. She had spoken to her fiancé earlier and both were excited about the ceremony. She and her mother arrived at the Houston County Courthouse and met Judge Janice Spires.

As with most expectant brides she greeted the judge with nervous smiles and chatter. Then she waited for the groom.

## Breaking with tradition

Airman Osby however would not be arriving in the traditional sense, in a limousine or other mode of transportation, but via telephone. This ceremony was the very first proxy marriage to

be performed by Judge Spires and a twist to the traditional ceremony.

“Because of the nature of the job, sometimes you have to deal with some sad situations and then you get a special blessing like this that comes and makes your day,” she said.

“I can’t believe I’m about to get married,” said Ms. Tennison as she awaited the connection. Though a phone malfunction would not enable the speakerphone to be used, the wedding went off without a hitch.

## Can you hear me now?

Standing ear-to-ear with the judge, the connection was made to Airman Osby thousands of miles away in Saudi Arabia and they became husband and wife in the same manner they met, via telephone.

It was only one year ago that the two met during a business call and fell in love.

A proxy marriage is not as easy as many may think. In place of tuxedo rentals and flower arrangements, they needed to find a judge to approve the marriage license and perform the marriage where the bride and groom are separated. They must also take care of the blood tests, paperwork, witnesses and the signing and faxing of notarized paperwork back and forth.

## Honors come in many forms

Ms. Becky Moody, civil law attorney with the Robins legal office, said the ceremony was beautiful and she felt privileged to have been there.

“It was really the highlight of my week to see two people united even though they were worlds apart,” she said. “This was the first proxy wedding I have heard of in my 15 years being here and it was wonderful.”

After saying I do, Mrs. Tennison-Osby said she is still excited and unbelievably happy. “We don’t know when he will be coming home, but we pray that it will be soon,” she said.

“I’m handling being away from my new husband as best as I can. It’s not easy. I want to have our home set up before he gets back, so we can spend some long overdue quality time together,” she said.

— Ms. Lanorris Askew, WR-ALC Public Affairs

*Ms. LaKisha Tennison-Osby talks to her husband, Airman 1st Class Christopher Osby, who’s deployed to Saudia Arabia, after completing their marriage ceremony over the phone. Standing with her is Judge Janice Spires, Houston County Probate Court. (Courtesy photo)*



*Air Force Chief of Staff Gen. John Jumper (center) comforts Mrs. Theresa Cunningham, wife of pararescueman and hero Senior Airman Jason Cunningham, during the Air Force Cross presentation ceremony at Kirtland AFB, N.M., Sept. 13. Airman Cunningham was killed during a rescue mission in Afghanistan March 4. Secretary of the Air Force Dr. James Roche is on the left. (Photo by Mr. Dennis Carlson)*

# Ceremony honors hero with Air Force’s highest award

A pararescueman who lost his life in Afghanistan while saving 10 lives and making it possible for seven others who were killed to come home, was posthumously awarded the Air Force Cross at Kirtland Air Force Base, N.M., Sept. 13.

Air Force Chief of Staff Gen. John Jumper presented the Air Force Cross to Mrs. Teresa Cunningham, wife of Senior Airman Jason Cunningham. Airman Cunningham’s parents, Mr. and Mrs. Lawrence Cunningham, also received medals from Gen. Jumper. The Air Force Cross is awarded for extraordinary heroism while engaged in action against an enemy of our nation. It is second only to the Medal of Honor.

The ceremony was short, beautiful and a little sad. A sea of maroon pararescuemen berets consumed most of the audience because the ceremony was held during a reunion of Airman Cunningham’s comrades. His family wanted it that way.

A tearful Secretary of the Air Force Dr. James Roche said, “We gather to salute his bravery and to reward his heroism. We gather to pay tribute to an airman who, on the field of battle, not only gave his life serving his nation, but also gave his life serving his fellow Americans.”

He joined the Air Force’s elite combat rescue program and graduated pararescue technical training at Kirtland in June 2001. He was deployed to Southwest Asia in February 2002.

On March 4, he was the primary Air Force combat search and rescue medic assigned to a quick reaction force in Afghanistan

sent to rescue two American servicemen evading capture in austere terrain occupied by Al Qaida and Taliban forces.

Before landing, his MH-47E helicopter received rocket-propelled grenade and small arms fire, disabling the aircraft and forcing it to crash land. The crew formed a hasty defense and immediately suffered three fatalities and five critical casualties.

The citation accompanying Airman Cunningham’s Air Force Cross reads, “Despite effective enemy fire, and at great risk to his own life, Airman Cunningham remained in the burning fuselage of the aircraft in order to treat the wounds. As he moved his patients to a more secure location, mortar rounds began to impact within 50 feet of his position.

“Disregarding this extreme danger, he continued the movement and exposed himself to enemy fire on seven separate occasions. When the second casualty collection point was also compromised, in a display of uncommon valor and gallantry, Airman Cunningham braved an intense small arms and rocket-propelled grenade attack while repositioning the critically wounded to a third collection point.”

The citation continues, “Even after he was mortally wounded and quickly deteriorating, he continued to direct patient movement and transferred care to another medic. In the end, his distinct efforts led to the successful delivery of 10 gravely wounded Americans to life-saving medical treatment.”

He was laid to rest in Arlington National Cemetery March 11.

— Mr. Terry Walker, 377th ABW Public Affairs

# Autism: Prompt action nets exceptional gains

Four-year-old Jeffrey Compton runs into the living room, smiles and gives his mom a high-five before running right back out to finish breakfast.

But, Jeff is not the typical, carefree 4-year-old he appears to be.

“A year ago, if I would say ‘Jeffrey, go get your slippers,’ he would just sit there. He wouldn’t even acknowledge me,” said his mother, Chief Master Sgt. Mindy Poist, who is stationed at Air Force Materiel Command headquarters at Wright-Patterson Air Force Base, Ohio.

## Concern surfaces

When Jeff was 2, Chief Poist suspected something was not quite right, but her pediatricians told her not to worry about his slow development.

“He got progressively worse until there was no doubt in my mind that something was wrong,” she said.

Jeff was eventually diagnosed with moderate to severe

autism, a serious, lifelong neurological disorder that can cause severe impairment in language, cognition and communication.

Chief Poist and her husband, retired Senior Master Sgt. “Butch” Compton, started researching the disorder.

What they discovered, she said, was that there were several things they could do. One of the first things they did was immerse Jeff in an applied behavioral analysis program, an intensive, one-on-one, behavioral and educational program that aims to optimize autistic children’s long-term functional outcome.

“ABA was a godsend,” she said. “Jeff showed marked improvement with regard to his social skills, eye contact and vocabulary.”

But the program, which can cost almost \$40,000 a year, was initially a financial burden for the family.

“Our ABA costs surpass our mortgage. But, you have to ask yourself ‘how much is this

worth?’ It’s an investment in his future,” said Chief Poist.

Another thing Jeff’s parents did was put him on a special wheat- and dairy-free diet. “The improvements were terrific,” she said. “It’s incredibly expensive, but you do what you have to do.”

There are also additional medical costs that don’t fall under Tricare’s coverage, such as visiting specialists and purchasing supplements, vitamins and therapy items.

“Any parent of an autistic child will tell you autism is not only heartbreaking, but it is financially devastating,” said Chief Poist. The family was assigned to Wright-Patterson under the Exceptional Family Member Program.

Program officials recommended she contact the Air Force Aid Society office.

## Unexpected help

The family received two separate, quarterly grants.

“I’ve been in the Air Force

for 20 years, and I donated to Air Force Aid all that time, and I never, ever expected to be on the receiving end,” Chief Poist said. The family is just starting to get back on track financially.

“For us, it was a transitional thing — a very helpful transitional thing. But, we were deeply grateful. They way I look at, they have invested in my son and that’s a direct link to my heart,” she said.

## A touching moment

“I got my first hug three months after he started therapy,” his father said. “If you ever want to see a 48-year-old man cry, you watch his three-and-a-half year old give him his first hug.”

“I am using every ounce of energy I have to battle this disorder,” Chief Poist said. “Every resource I have is going after this. I am so grateful there are so many people to help me with it.”

— 1st Lt. Danielle Burrows, ASC Public Affairs

# Program gives spouses tools for military life

*(Editor’s note: The Family Support Center at Tinker Air Force Base, Okla., recently held its first Heart Link seminar at the officers’ club. The following is a first-hand account from a military spouse who attended the event.)*

— Ms. Sarah KIELTY  
Tinker AFB, Okla., Public Affairs

Between spending months apart, being uprooted every two years, and dealing with unique job pressures, life and love in the military can be exciting — but also a little overwhelming.

The Heart Link program, offered through the Tinker Family Support Center, recognizes the stresses military life places on spouses and tries to prepare them for what lies ahead.

I’ve been married for seven years and thought I knew just about everything the Air Force could offer me as a spouse. What wisdom could the family support center offer that I hadn’t already encountered? Four days after we were married, I was on a plane to Incirlik Air Base, Turkey.

## Crash course on military life

I’d been slam-dunked into the life and wasn’t quite sure I was up for it. Luckily, I had a wonderful friend who walked me gently through the rough spots. And, today, I learned that there are spouses out there who want to help the new spouses have an easier time than a lot of us had.

The agenda that morning started out with approximately 30 women being introduced, with a few of those being termed “senior spouses,” meaning they’d gone through several years of marriage and permanent changes of station. While the program is available to both men and women, this particular day all the attendees were female.

## New discoveries

Col. Dennis Kaan, 72nd Air Base Wing commander, delivered the first briefing, describing all the organizations on base and their missions. I’ve asked my significant other ‘til I’m blue in the face and frustrated, exactly what his organization does, but for the life of me I didn’t really comprehend until I saw the slides at this briefing. Now it’s starting to click, and



*To help get acquainted with the functions of on-base agencies, Misses Sophia Phillips, Jennifer Bray and Penny Hagan, from left, wives of Tinker military personnel, play a game at the Tinker's Family Support Center Heart Link seminar. (Photo by Ms. Margo Wright)*

perhaps I’ll have my spouse develop a slide show for every PCS.

Col. Kaan turned the briefing over to some of the base agencies: 72nd Medical Group, family services, finance and protocol. Each representative was very informative and willing to answer any questions.

We were then ushered onto an Air Force bus for a tour of the base. Even after being at Tinker for a year, there are places I would never have known about had I skipped this portion of the briefing.

For example, the golf course sells ribs and brisket by the pound. Or, the story of purchasing the land by the north Air Depot gate and why Tinker employees still maintain the cemetery.

During lunch, I discovered that the lady I was sitting across from has been married two weeks and was already thoroughly confused with her initiation into the Air Force. Although she grew up in Oklahoma, everything was so different than her previous lifestyle. The acronyms, jargon and traditions were a little overwhelming, but I suspect that in a month, she’ll be shortening her sentences just like the rest of us.

## Getting tools we can use

After lunch, we were given our “tool kit,” or as I have been lovingly referring to it, the survivor’s guide to Tinker Air Force Base. It’s a booklet of the different support agencies, programs and facilities

located on Tinker from Air Force Aid Society to the youth center.

It also includes a rank structure and a guide to frequently used acronyms, this booklet is a wonderful guide to the most sought after information that tends to baffle even the most knowledgeable spouse.

Another discovery from the briefing came from the folks at the family advocacy office. They have different programs that can help with the challenges of our day-to-day lives as military spouses; weekly play groups, new parent support programs, parenting classes and marriage enrichment, to name a few. Their primary goal is to strengthen the military family and its surrounding community.

Finance had a wonderful briefing that showed me things are going to be different everywhere we move, how to get access to leave and earning statements and how to interpret information being given on the statement.

By the end of the afternoon, I realized these senior wives interspersed around the room had been already through these “mini-tragedies” that we were likely to encounter as a military spouse. They had learned how to survive and are now there to help the new wives do the same.

In my eyes, the Air Force has moved away from the “white-gloved” era with its strict pecking orders among senior and junior spouses. This class sends the message that we are all in it together.



*Jeff Compton, age 4, was diagnosed at an early age with severe autism, pays close attention as his big sister Jill, 6, spells out her vocabulary words. His family moved to Wright-Patterson AFB, Ohio, a little more than a year ago under the Exceptional Family member program, where he has made incredible developmental gains, according to his mother, Chief Master Sgt. Mindy Poist. (Courtesy photo)*



*Left to right: Misters Vince Velten, Mark Minardi, Devert Wicke and Marty Justice, AFRL Sensors Directorate, perform in their barbershop quartet “Close Enough.”*

# When singing is ‘Close Enough’ for government work

Thanks to four talented employees of the Sensor Automatic Target Recognition Division of the Air Force Research Laboratory Sensors Directorate, delightful old-time harmonies often waft through the halls.

Misters Marty Justice, Mark Minardi, Vince Velten and Devert Wicker, all electrical engineers, decided four years ago to not only work together, but sing together as well, forming “Close Enough,” a barbershop quartet.

“The camaraderie of these division leaders is infectious,” said Mr. Ed Zelnio, division chief.

## A load of experience

With a combined 80 years of civil service under their collective belts, their enthusiasm is contagious — not only for the work they take fierce pride in, but the joy they bring to others with their talents, according to division personnel.

These self-admitted “geeky gents” rarely have their pockets unprotected, but are thrilled to share their talents with oth-

ers, singing at many official functions, both on and off Wright-Patterson Air Force Base, Ohio. Approximately 70 percent of their performances are gratis.

At the recent farewell for Col. Larry Strawser, their former deputy director, they presented an amusing rendition of “Wait till your Star Shines, Larry.”

“Their act was the hit of the farewell activities,” according to Col. Strawser.

## Loving what they do

Obviously these engineers are bright. “Learning new words is a snap,” said Mr. Minardi. “Ed wrote up new words to ‘Wait till the Sun Shines Nellie’ and we looked over them 30 minutes before we sang that day.”

“We enjoy all of our performances, but to sing at hospice is especially touching,” said Mr. Justice, the group’s baritone. “The patients are so appreciative, and often beg us for ‘just one more.’”

In addition to singing at Children’s Medical Center, retirement homes and many local churches, “my favorite gig

was singing the national anthem at the Dayton Dragons game,” said Mr. Wicker, the group’s bass. “The crowd just roared when we finished!”

## Special memories

Mr. Zelnio recalled a Valentine’s day that “Close Enough” surprised his wife Sally, a volunteer at Holy Angels school. The kids delighted in not only the music, but seeing Sally blush.

Mr. Velten, the group’s tenor and technical advisor, is the self-admitted “geekiest” of them all — having more gadgets than the others. In his palm pilot, he has the key signatures to all the songs they sing, just in case. “You never know when you’ll need it,” he said.

All four agree that although the sensors directorate has many talented employees, both military and civilian, there’s no question that none have more fun than “Close Enough.”

— Ms. Grace Janiszewski, Wright Technology Network

# ‘Candy Bomber’ re-enacts Berlin candy drop during Hanscom visit

A retired pilot best known as the “Candy Bomber” recently visited Hanscom Air Force Base, Mass., with a message for their youth on the importance of making smart decisions.

Col. Gail Halvorsen’s adventure started one day, more than 50 years ago, during the Berlin Airlift, with two sticks of gum, a group of war-ravaged children and a great deal of generosity. Col. Halvorsen, then a lieutenant and a C-54 pilot serving in Germany, met a group of Berlin children gathered on the other side of a perimeter fence at Tempelhof Airport.

“They didn’t have gum or candy. They didn’t have enough to eat — but they wouldn’t beg me,” he said.

The children were suffering from the effects of the Soviet blockade, he said. Josef Stalin had placed the region under communist rule, blocking the roads, railroads and canal routes coming in and out of Berlin, and they couldn’t receive food, clothing, heat and electricity, so the United States and British military started to deliver the supplies by airlift.

Col. Halvorsen recognized the children needed not only nourishment, but hope for the future. He took the sticks of chewing gum from his flight suit, split them in half and gave the pieces to four children. Those that didn’t get any just wanted the wrappers — the smell alone made them happy. He promised to deliver more by air the next day.

The colonel was touched by their maturity and understanding of what it meant to have their freedom taken away. “They knew what was important,” he said. “Freedom was more important than flour. They said, ‘We’ll put off enough to eat. We can do that.’ The principle of freedom in their decision making was what was most important in their lives,” he said.

After leaving the children, he returned to his squadron to round up more candy and gum rations, which he tied to homemade handkerchief parachutes. The next day, upon approach to the Tempelhof Air Field, the crew pushed the parachutes out of the plane and watched as they descended into the waiting hands of the German children.

From then on, more and more candy drops were scheduled, gaining the media’s attention and global support of those wanting to donate the candy and parachutes needed to sustain the operation. By the time the Berlin airlift ended, Col. Halvorsen, who is now affectionately nicknamed the “Candy Bomber,” said that more than 23 tons of candy was dropped using 250,000 parachutes in 15 months.

Col. Halvorsen, who retired from the Air Force in 1974 after 31 years of service, is 81 years old. Fortunately, he still enjoys traveling to speak to groups of children and adults. During his visit to Hanscom and the local community, he shared words of wisdom and also participated in a candy drop re-enactment. While there, he spoke to Hanscom’s students during a special assembly on the importance of making smart decisions.

During the week leading up to the candy drop, Hanscom’s students were busy learning about Col. Halvorsen and his mission during the Berlin Airlift. Volunteers from Hanscom served as guest speakers for the students by explaining the history behind the “Candy Bomber” and preparing them for his visit.



*Col. Gail Halvorsen, best known as the “Candy Bomber,” greets children during a visit to Hanscom AFB, Mass. More than 1,000 people attended the event. (Photo by Ms. Linda LaBonte Britt, ESC)*

Teachers and staff members shared a children’s book, “Mercedes and the Chocolate Pilot,” written by local author Ms. Margot Theis Raven, with the students. In the book she explains the true story and relationship between Col. Halvorsen and Mercedes, a child he helped during the airlift. “I decided that if I concentrated on his relationship with Mercedes then I could tell in a microcosm the greater story of his giving to all the children of Berlin,” she said. “I was taken with the great humanitarianism story in general, and in particular, with the work Col. Halvorsen had done to help heal the hearts of the Berlin children.”

Col. Halvorsen has participated in candy drops in the United States, Japan, Guam, the Micronesian Islands, at the refugee camps in Bosnia and at Camp Hope in Albania.

“I keep doing this because I see people who are generally interested and understanding of this period of history,” he said. “So many young people don’t know much about it and it’s important for them to study and know about this.”

The biggest message the colonel likes to share with his audiences is about service. “Fulfillment in life and sense of well being doesn’t come from a bigger bank account or a faster car, it comes from serving others,” he said. “That’s why they say we’re in the service, for this is the reason this country was founded, not because of the accumulation of material wealth.”

— 2nd Lt. Stacie Shafran, ESC Public Affairs

# Life 'in the fast lane' part of Brooks couple's pro motor sports passion

Mrs. Denise and Mr. Tommy Owen had just finished their race when they witnessed actor-turned-professional race car driver Mr. Jason Priestley slam his Indy Racing League car into the wall at the Kentucky Super Speedway during a practice run. It was yet another sobering reminder of the inherent dangers of an unforgiving sport that they have pursued since high school.

"We were loading our trailer when it happened. We saw the crash," said Mrs. Owen in describing the accident in which the former "Beverly Hills, 90210" star suffered multiple injuries, including a fractured spine, during a collision at 180 mph.

## Team members

Fortunately, the driver the Owen couple is pledged to support has not had any serious injuries. As members of San Antonio's Aramendia Racing Team, they know their roles are vital to the success of the Aramendia family's NASCAR investment and to the survival of the team's driver, Mr. Joe Aramendia.

Mrs. Owen, branch services manager for Eisenhower Bank located at Brooks City-Base, Texas, serves as the racing team's scorer.

"I count the number of laps our car takes on the track," she said, a job not too dissimilar to what her father, Mr. Homer Hartness, used to do in tracking aircraft as a former Brooks Field air traffic controller.

Her husband is the team's full-time crew chief who is responsible for helping build and maintain race cars.

"In high school I bought a drag racer," Mr. Owen said of his early days as a race car driver. However, he doesn't regret having switched to an auto mechanics career that has propelled him into the fast lane of NASCAR's racing elite.

## A family affair

The Owen's passion for the sport is fueled by the Aramendia brothers who have built San Antonio's top racing team.

"Our father brought us up at the race track. We are carrying on a family racing tradition," said Mr. John

*Top: The Owen's pit crew prepares the Aramendia race team's car for competition at the Nashville Superspeedway in Tennessee. Middle: Mr. Joe Aramendia in #50 at the speedway. Bottom: The Nashville Superspeedway is one of a dozen races the Aramendia race team competes in annually. (Courtesy photos)*

Aramendia, owner of the racing team and the plumbing business he and brother Joe started 14 years ago.

"We compete in the All-Pro class. Our goal within a year is to compete at the Bush Series level," said Mr. Aramendia who has underwritten the staggering costs associated with professional racing.

An average race car today costs about \$75,000. The expenses associated with racing a full season are astronomical. The average annual cost to support a Bush Series level team is between \$3-5 million.

The Aramendia team needs corporate sponsors to fulfill financial requirements associated with competing at the next level. Corporate sponsors, the sport's lifeblood, often reap huge returns on their investment through advertisement.

## Air Force recruiting

The U.S. Air Force sponsors a NASCAR racing team which competes for the sport's top level prize — the Winston Cup. For their sponsorship, the Air Force name and logo are advertised on the racing team's cars and promotional material that serve as a highly visible recruiting tool within America's most popular spectator sport.

Dispelling a myth about why most racing teams compete, Mr. Aramendia said, "What people don't realize is teams don't survive off of races' winnings. They survive off of corporate sponsors." At their level, the top prize for winning a race ranges between \$15,000 and \$30,000. Teams primarily earn money and bonuses through the NASCAR point system that rewards them for their ranking based on season performances.

"I'm in it for Joe. He is a championship winning driver," said Mr. John Aramendia. He admits they struggled financially building a business that supports their racing team which includes brother James.

The team's primary focus is supporting and protecting their



*Mr. and Mrs. Tommy Owen, who have ties to Brooks City-Base, Texas, share a passion for racing a passion they've carried down through the family generations. Shown here is Pro race car driver Mr. Joe Aramendia, whose team the Owens support. (Photo by Mr. Rudy Purificato, 311th HSW)*

driver. "I've learned that the pit crew plays an important part in the success of the team. Usually 15-20 people support the race, with the pit crew limited to about seven key people," said Mr. Tommy Owen. The crew chief directs the pit crew which includes two tire changers, two tire carriers and jack, gas and catch can men. The latter uses a can to catch overflow fuel during re-fueling to prevent possible fires that could lead to an explosion. Less than 20 seconds is the pit crew industry standard to support a pit stop.

"For people to enjoy a race, there's a whole lot that happens behind the scenes. We spend 40 hours a week preparing for a race," Mr. John Aramendia said.

Besides maintaining four race cars, the team must operate a 53-foot-long transport trailer stocked with spare parts and equipment such as communications gear used by the team's spotter. As spotter, Mr. James Aramendia is in constant radio communication with the driver and pit crew to inform them of any accidents.

## Mistakes happen

Mishaps are sometimes unavoidable. "I went over the wall at the San Antonio Speedway when the throttle stuck. I landed 150 feet away on a six-foot chain link fence. A fence post impaled the car, but missed me by two feet," recalls Mr. Joe Aramendia.

While he fractured his helmet and was semi-conscious, he raced the following weekend. "I had a life insurance policy before I started racing, but I got stuck paying a \$3,000 airlife bill," he admits.

"This is the first year we've competed for the whole season," Mr. Tommy Owen said of a schedule that includes 13 NASCAR-sanctioned races. Their season ended with an Oct. 19 race in Memphis, Tenn.

— Mr. Rudy Purificato, 311th HSW

# He keeps an eye on the future

**M**r Eugene Solimine has spent the past 53 years serving America. After serving in both the Army and Navy during World War II, in the Air Force during the Korean and Vietnam Wars, and then retiring with more than 25 years of military service, he began his civil service career.

He was drafted while attending New York University to serve as an infantryman in the Army during WWII. At the end of an 18 month tour Mr. Solimine sought a transfer to the Navy, in search of better combat conditions.

"I knew I could sleep in a clean bed, as opposed to the cold, unclean conditions of the Army," he said.

His one year Navy stint began as a drill instructor. Afterwards, he worked as a postal dispatcher. Finally, in mid-1945 he was assigned to a destroyer escort in the Pacific.

When released at the end of WWII, he returned home to East Harlem in New York to finish college because at 21, he was still young enough to be redrafted.

He returned to school with the plan that if there was ever another war and military duty was required, he would serve as an officer.

## Preparing to serve

Mr. Solimine completed his education at New York University and Brooklyn Law School. After passing the bar, he received a reserve commission as a 1st Lieutenant in the Judge Advocate Generals office of the Department of the Air Force.

This was the beginning of a 25 year Air Force career which took him through the Korean and Vietnam wars. He retired on Nov. 1, 1977, as a Lieutenant Colonel.

Mr. Solimine is now a special assistant to the Air Force Material Command Staff Judge Advocate directorate of contract law for audit and pricing matters at Wright Patterson Air Force Base, Ohio.

Mr. Anthony Perfilio, director of the Air Force Material Command Law Office and Mr. Solimine's boss, refers to him as

"a master negotiator, an effective advocate. He has a great deal of experience as a very effective trial attorney." Previous military jobs allowed Mr. Solimine to gain knowledge which resulted in a "seamless transition" from military to civilian service with the Air Force when he retired, he said.

During his career this 78-year-old has been referred to as the preminent authority, been given the Defense Department Distinguished Civilian Service Award and earned the Bronze Star Medal.

"A definite positive is the 'excellent training' received and the diversity. Being from Harlem New York," he said "I grew up with diversity."

## Creating a niche

"Experience came to me instead of my having to go to experience," Mr. Solimine said. He is the primary authority on the Truth in Negotiations Act passed in 1962, which is the main way contracting officers are able to negotiate with contractors on a level playing field. His 40 years of experience grew up around this legislation, which encompasses approximately 1,000 cases closed with more than \$1 billion recovered."

## Mentally fit

"Not only is he a tremendous lawyer, but he is a great role model for young people — he is all the things you would like young people to aspire to," said Mr. Perfilio.

And in fact, lawyers run in his family. Three of his six children have followed in his footsteps, as have two of his inlaws. "I encouraged all of my children and my 12 grandchildren to become professionals," he said.

For Mr. Solimine, questions like "Why are you still here when you don't have to be" are stated simply. "I maintain interest in what goes on around me", he said. "The awards, medals and accomplishments are all part of a life gone by. I'm looking to the future."

— Ms. Estella Holmes, AFMC Public Affairs



**Mr. Eugene Solimine is going strong and is still excited after more than 52 years of service. He has served many roles during a career which spanned the decades and is currently the special assistant to the Air Force Material Command Legal Office. (Photo by Ms. Estella Holmes)**

# Life experiences demonstrate 'heart' of Arnold champion

**F**or most, the word "champion" incites the image of a muscular athlete sprinting to be first across the finish line. But as wife, mother and community advocate for the March of Dimes, one Arnold Air Force Base, Tenn., senior engineering associate demonstrates how acts of selflessness, no matter how big or small, can transform one into a champion.

Ms. Rebecca Combs moved to Manchester, Tenn., with her family when she was in 10th grade. It was shortly after the move that she met her future husband, Mr. Lew Combs.

"I met Lew on Halloween night, and about Christmas, we started dating," she said. "We started going steady at Easter and have been going ever since. They used to call me Beckylew in high school, because we were inseparable."

As high school sweethearts, they married four years later, after she completed one year at Motlow State Community College. Thirty years later, she earned her bachelors degree in business administration.

September marked the Combs' 31st

anniversary. They have two children — a daughter named LeAnne, 27, and a son named Lewie, 24.

For Mrs. Combs, motherhood revealed great joy as well as strengths she did not know she possessed. In June 1989, their son, Lewie, suffered kidney failure and had to undergo dialysis in 1994 until he could have a kidney transplant.

Mrs. Combs volunteered to be the donor, and give her son life for the second time in February 1995. At that time, doctors informed the family that transplants generally last from 10 to 12 years. After that, the chances of the recipient needing another transplant were probable.

Lewie had seven healthy years before suffering kidney failure a second time and having to return to dialysis. Mrs. Combs explained that the kidney failure was the result of hemolytic uremic syndrome, or HUS, which is acquired through contracting the Ecoli bacteria.

Fifteen family members and friends volunteered for testing to be a kidney donor for the second transplant, and five were a compatible match.

"My niece, Kerri Evans, was chosen to be the donor," Mrs. Combs said. "I'd give my other kidney for him, but they wouldn't let me. Donating an organ is the ultimate gift of life. Kerri will always be a special part of Lewie."

For the past 18 years, Mrs. Combs has been an active volunteer with the area March of Dimes.

"I've always enjoyed working with the March of Dimes, it's a great charitable organization," she said. "I also got involved in the Special Olympics while Lewie attended the Tennessee School for the Blind in Donelson, Tenn. She jumped at the chance to be one of Arnold's Special Olympic volunteers."

Mrs. Combs' involvement with the March of Dimes organization is for personal reasons.

"Lewie was born blind from a birth defect," she said. "It wasn't anything the March of Dimes could have helped with, but the organization is very special to me. Children that need help motivate me to help. The March of Dimes is a good program. I like it, because 90 percent of the money goes to the research and to the cause, and the other 10 percent goes to fund the administration cost of the program," she said. "The research the program funds really helps prevent birth defects and that means a lot to me."

Mrs. Combs' life experiences and her works demonstrate heart, but more than that, they demonstrate the heart of a champion.

"If I had a hero, my hero would be Lewie," she said. "He's very special. To me, he's very strong. He's got such a good attitude. He's had a lot happen to him, but he really outshines everything. He's had so much on him, but he always comes out smiling."

— Ms. Danette Duncan, AEDC Public Affairs

**Ms. Becky Combs, an Arnold AFB, Tenn., engineering associate, and her husband Lew visited Alaska as a 30th wedding anniversary celebration. (Courtesy photo)**



# Support comes in many forms for Tinker family

When an employee at Tinker Air Force Base, Okla., found herself with a newborn diagnosed with a rare disease even her doctor hadn't heard about, she felt like there was nowhere to turn.

But with some support from her B-1 Bomber co-workers and a life-changing experience with a Combined Federal Campaign agency, things are finally looking up.

## Out of the blue

Nothing seemed out of the ordinary when Ms. Randi Freimann, B-1B avionics item manager, gave birth to a son in March. So it came as a surprise when she and her husband, Charles, a production material technician in the maintenance material support division, took Brandon to the pediatrician for a routine checkup and found he had a heart murmur.

"They sent us to see a cardiologist who immediately saw the problem, but did not tell us what it was," she said. "We were told the pediatrician would call us and explain the results. We didn't know how bad it was.

When we went to see the pediatrician the next day she told us that Brandon had aortic stenosis and pulmonary stenosis." Aortic stenosis is a narrowing of the aortic heart valve and pulmonary stenosis is a narrowing of the pulmonary valve. If the conditions worsen, surgery is usually required.

## A rare disorder

The doctors told the Freimanns that it was possible Brandon had Williams Syndrome. "Brandon's heart condition, along with his facial features, made Williams Syndrome a probable diagnosis," Ms. Freimann said. "They ordered a blood test that eventually confirmed it."

The syndrome is characterized by the lack of genetic material that makes protein elastin, which provides strength and elasticity to vessel walls.

This is a rare, congenital disorder that occurs in one in every 20,000 births according to the National Institute of



*Diagnosed with the rare Williams Syndrome, Brandon Freimann depends on the Combined Federal Campaign to provide the funds for much-needed information about the disease for his doctors. Brandon's mother, Randi, pictured, works in the Product Support Directorate at Tinker AFB, Okla., and his father, Charles, works in the Maintenance Material Support Division. (Photo by Ms. Margo Wright, OC-ALC)*

Neurological Disorders and Stroke. Characteristics include heart and blood vessel problems, elevated calcium levels, delayed growth, feeding difficulties, irritability during infancy, dental and kidney abnormalities, sensitive hearing, musculoskeletal problems, an impulsive and outgoing personality, limited spatial skills and motor control and intellectual disabilities such as developmental delays, learning disorders, mental retardation or attention deficit disorder.

## Looking for answers

Ms. Freimann said it took about two-and-a-half weeks for Brandon's blood test results to come back. "That time period was the hardest for us. Once we knew it was positive, we started searching for answers."

While the disease itself is not fatal, doctors said patients face serious complications and medical problems, prompting the Freimanns to find out everything they could about the disease.

That is when her co-workers came through — she received 320 hours of

donated leave to care for Brandon, take him to specialists and attend a Williams Syndrome medical convention in California.

"The Tinker community is always there to lend a helping hand to those in need," she said. "They are so supportive and understanding. To be able to go talk to these specialists and have Brandon evaluated by them is a once-in-a-lifetime opportunity."

With this being such a rare disease, she said it was difficult to find the information and support. She said the conference changed her life. The event was sponsored by the Williams Syndrome Association, which gets some of their funds through the Combined Federal Campaign.

"One thing the association does with the money is publish medical materials for parents and caregivers," she said. "We received a lot of material from the conference to give to our doctors on how to treat Brandon. Without them putting on this conference we wouldn't have this knowledge."

## It's never too late to learn

This was particularly important since many doctors, like Brandon's, had never seen a Williams Syndrome case in their entire career.

"When my doctor told me they suspected Williams Syndrome, she also added she did not know anything about it, except what she had found in an old medical book of hers," Ms. Freimann said.

"The Williams Syndrome association has provided medical guidelines that they, in conjunction with the American Academy of Pediatrics, have published to help facilitate care for these patients," she said.

"This has helped my doctors discover medical problems that may not have been discovered or would have taken years to discover, at least until Brandon could talk and tell us what hurts."

Armed with this knowledge, the Freimanns teamed up with doctors to treat their son. With that knowledge, he is now gaining ground through therapy and medication.

## An uncertain future

The prognosis for Brandon is still uncertain. Some individuals with Williams Syndrome may be able to master self-help skills, complete academic or vocational school, and live in supervised homes or their own, while others may not progress to that level.

"We do not know if Brandon will ever be able to live on his own," Ms. Freimann explained. "But we are hopeful."

## On giving back

Grateful for the agency's help, she has volunteered to serve as the B-1B division representative for CFC.

"It's a way to give something back for all of the help and support we've received," she said. "I want to make people aware of the Williams Syndrome association and how they have helped Brandon. Brandon couldn't receive the essential medical care he has without their help."

— Mr. Ray Dozier, OC-ALC Public Affairs

# Prisoners of War recount experiences

When retired Army Col. Pendleton Woods was held captive by the Germans during World War II it not only was the most traumatic experience in his life but also the greatest learning experience. "We learned how to share with one another when there was very, very little to share. We learned to help one another in very difficult situations," he said.

Col. Woods was the guest speaker at a recent POW/MIA breakfast at Tinker Air Force Base, Okla.

He enlisted in the Army in 1942 and was captured behind enemy lines in December 1944 during the build-up for the Battle of the Bulge.

He and seven comrades were first imprisoned in Duren, Germany. The winter of 1944-45 was one of the coldest in Europe and the jail had no heat. The prisoners had only one blanket to share.

After three days in Duren, they were taken to a railroad boxcar designed to hold about 40 men, but held about 100. They spent eight days in the boxcar before being led to Limburg, Germany. He said the prison was so crowded that not all prisoners could lie down on the concrete floor "without being crisscrossed over one another."

"There was only one latrine in the corner of the room and in order to use it they would have to crawl over the bodies of fellow prisoners," he said.

"You could imagine what a miserable Christmas it was," he said, but the prisoners "tried their best to maintain a Christmas spirit." Some of the men sang Christmas hymns on Christmas Eve. "Pretty soon, all over the prison the prisoners were singing 'Silent Night,'" he added.

About a week later, they were moved to Luckenwalde, Germany, south of Berlin. For the first time, he was able to sleep on a bunk, although it was a far cry from being comfortable. Two prisoners shared a bunk and one blanket. He said they were given coffee in the morning, a small portion of a food that resembled a rutabaga for lunch and a loaf of bread divided among 10 men for dinner.

The prisoners often talked and dreamt about food, "fancy things their mothers or wives made at home. Food imaginations really ran wild," he said. He said hunger was "all over the body. The stomach actually shrunk itself, but the blood had tremendous malnutrition. When you reach this point, it makes no difference how much you eat because the blood could not absorb it."

It took six weeks after coming home before he quit being hungry.

On April 20, 1945, the Russians were invading Luckenwalde when the prisoners noticed a fence had been destroyed from the artillery fire. They decided to make their escape to American lines.

They headed south "because that's where the allies were coming in," he said. Then they traveled west. It took five days to reach American lines at a tributary near the Elb River.

Mr. William Grisez of Tulsa understood how Col. Woods felt during those times because he too was a private when captured in Sicily in July 1943. During his two years of imprisonment, he drew the American flag on a towel using blue and red pencils he got from French prisoners. He drew the flag by candlelight at night keeping it hidden from the guards.

"I kept it hidden for two years, then they moved us out when the Russians were coming," he said. "We made a 360 mile march in ice and snow and I had this hidden near my body and the last two or three days of the march — that's when I got this out and flagged it all the way to the American line."

— Mr. Ray Dozier, OC-ALC Public Affairs



*As an Army private taken prisoner by the Germans in World War II, Mr. William Grisez worked by dim candlelight at night to create an American flag on a towel using borrowed pencils. (Photo by Margo Wright)*

# Hill employee rescues father, daughter from burning truck

A desolate stretch of Wyoming interstate seems an unlikely place for heroics, but an employee from Hill Air Force Base, Utah, recently fought through fire to pull an injured trucker and his daughter to safety there.

Mr. Alan Ryther, acting director for the document automation and production service at Hill, was headed to Denver on Interstate 80 with his daughter, brother and sister-in-law when a tractor-trailer truck slammed into the back of a panel truck nearby. The accident happened as they were pulling back on the interstate after stopping at a rest stop at a remote spot about 40 miles from Rock Springs, Wyo.

"As the driver slammed on the brakes, the trailer accorded in on the cab of the 18-wheeler," he said. "The engine was lying on the freeway in pieces. It was smoldering — just a mess."

## Rushing to help

Mr. Ryther yelled to his brother, who was driving their van, to get over there as quickly as possible. While his brother called 911, he rushed to the crash site to find the truck driver, Mr.



Daniel Montgomery, and his 15-year-old daughter, Sarah, trapped on the passenger's side of their smoke-filled cab. He tried to open the passenger's side door only to find it jammed.

"The fire was coming up around us; it was burning her (Sarah) and was up around my waist," said Mr. Montgomery. "The windshield was cracked so I took my right arm, ran it through and pushed it out."

He said Mr. Ryther got debris out of the way so the father and daughter could get out. Sarah went out the windshield but Mr. Montgomery said his leg got caught as he was exiting.

Sarah dove from the broken window, hitting the tire and landing hard on the pavement, Mr. Ryther said. With help from some bystanders, he helped her over the guardrail to safety and went back to pull her father from the wreckage.

## Returning to the scene

"I'm dangling out there and Alan is pulling on me," Mr. Montgomery said. "He was afraid that he was going to break my leg, but he didn't want me to burn up either, so he just kept pulling. If he had not been there I would have burned up."

Within seconds after getting over the guardrail the entire area was engulfed in flames, according to Mr. Ryther.

"It was close," he said. "Dan was bleeding pretty badly, so we got him bandaged up. His head and arm were really battered."

Concerned passersby, including Mr. Ryther and his family, comforted and administered first aid to the injured until emergency vehicles arrived.

According to Mr. Montgomery, Mr. Ryther's assistance didn't end when the ambulance arrived; he made a few phone calls.

"Alan called me to let me know about the accident and he called my husband's work, he was so very nice," said Mrs. Judy Montgomery, wife and mother of the crash victims.

## A close call

In the accident, Mrs. Montgomery said Sarah fractured her spleen and was in the intensive care unit for four days.

"She's progressing and coming along pretty good," she said. "The truck was burned to an unrecognizable heap of metal. If it hadn't been for Alan, I guess my husband would have burned right up with it. I'm thankful he decided to stop there and stretch a little — if he had been anywhere else, I don't know what would have happened."

"You don't think about it, you just do it. That's how I was taught — my father taught me to be that way," Mr. Ryther said about risking his safety to help the Montgomerys. "I couldn't have lived with myself if I wouldn't have tried to help."

Mr. Montgomery said he recently felt good enough to go back to work as a truck driver.

— Ms. Beth Young, OO-ALC Public Affairs

*The Montgomery truck sits as a burnt pile of metal after an accident in a remote area of Wyoming. Mr. Alan Ryther (inset), an employee at Hill AFB, Utah, recently helped rescue a father and daughter from the accident. (Courtesy photo)*

# Deaf machinist hears with hands

Although many people say he is an outstanding machinist, Mr. Michael Harnish, a civilian machinist with the 412th Maintenance Squadron, Edwards Air Force Base, Calif., has never heard them say so.

Deaf since birth, Mr. Harnish hasn't heard a sound in 50 years. Although he says being deaf isn't bad, it has caused a few bumps in the road.

## Communicating

"When I was growing up, I was strictly what's called 'oral,'" Mr. Harnish said through Ms. Amber McGuire, his American Sign Language, or ASL, interpreter. "I was taught to read lips and try to speak. However, when I went into high school, it was 100 percent signing, so I had to learn it to communicate."

He got his initial machinist training from the Michigan School for the Deaf in Flint, Mich., and entered the workforce with General Motors.

Layoffs at General Motors brought Mr. Harnish to the Antelope Valley. He worked for his father until he landed a job at Edwards in 1984 after completing a vocational rehabilitation program.

The transition wasn't always easy. "When I first entered the job market, it was very frustrating because there were no interpreters," Mr. Harnish said. "When I first started working here, Edwards had a volunteer interpreter who could sign a little. When she left, there was no one."

Part of the problem in dealing with the hearing, he said, was that sign language is a completely different language, and it doesn't always translate well into English.

"I would write notes to them, but because I was writing the way I sign in ASL, we wouldn't understand each other," he said.

Edwards now has two full-time interpreters, to whom he attributes some of his career success. "I was able to know

what people were talking about, and it was a lot easier to learn," he said.

## Feel for machinery

A large part of Mr. Harnish's duties involve operating machinery. But once the machine is running, he relies a lot on his sense of touch to ensure the machinery is working right. "My hands are very sensitive, so I feel the vibrations through my hands," he said. "It's hard to explain, but if a machine is making a strange noise or a very loud-pitched noise, the vibrations change."

According to Mr. Harnish, many deaf people start to rely on their sense of touch and how things are vibrating and moving. "Hearing people rely on their ears," he said. "So if they hear a funny noise, they know something is wrong. I rely on my hands."

## Fitting in

Mr. Harnish said he loves

socializing and interacting with both hearing and deaf cultures. "Now, a lot of the hearing people I interact with are becoming interested in sign language and are taking classes, so it's becoming a lot easier."

Mr. James Whitecotton, one of Mr. Harnish's co-workers, said at first it was difficult to communicate with him around work, but after he took a signing class, communicating is easy.

"He is such a nice guy and is always the first one to help out a co-worker, and he doesn't let his handicap affect his work. He demands to be treated like everybody else."

Mr. Harnish said he is much happier today than when he first started, because much of the frustration is gone.

"Communication and work is going a lot smoother, and there is a lot more interaction and camaraderie amongst my co-workers," he said.

— Tech. Sgt. Christopher Ball, AFTC Public Affairs



*Mr. Michael Harnish, a 412th Maintenance Squadron machinist, uses a computer-controlled milling machine to create aircraft parts. Deaf since birth, Mr. Harnish relies on his senses of sight and touch to do his job. (Photo by Tech. Sgt. Christopher Ball)*



Left to right: The Hicks Family: Ebony, 3, Lakendra, Samiya, 5, and Marcus spend some family time in their new home in base housing. (Photo by Airman 1st Class Emily Butali)

## ‘Operation Restore Hope’ gives airman new home

What seemed like “an ordinary summer day” turned out to be anything but that for an airman at Eglin Air Force Base, Fla., when everything she and her family owned went up in flames during a base housing fire July 10.

But thanks to a dedicated first sergeant and help from the rest of the “team,” Airman 1st Class Lakendra Hicks, 46th Operations Support Squadron airfield management shift supervisor, and her family have new housing and are doing fine.

Airman Hicks said her husband, Marcus, had been cooking when the grease fire occurred at approximately 1 a.m. No one was injured.

### Lost without a home

Airman Hicks said her entire family, including daughters, Samiya, 5, and Ebony, 3, felt hopeless until Master Sgt. Michael Braswell, 46th Operational Support Squadron first sergeant, restored their hope by immediately putting out the word of the family’s tragedy. Clothes, furniture, money, toys and food soon began pouring in. Sgt. Braswell said he knew they were going to need a lot of help.

“I called and found lodging at Hurlburt Field, Fla., for an indefinite period of time and made sure they had money for food and everyone was all right for the night,” Sgt. Braswell said.

“Sometimes in a crisis like this, a person can’t think clearly or make decisions they’re faced with at the time because they’re dealing with tragedy. I try to help with this,” Sgt. Braswell said.

Airman Hicks said she was without a home for only two days due to the help she received from Sgt. Braswell and almost every organization on base.

“On the first day, I had enough calls and e-mails to more than furnish the house. Toys and clothes for the children were also received,” Sgt. Braswell said.

“The base chapel, 33rd Fighter Wing, Air Force Aid Society, Red Cross, 46th Test Wing, base housing and various units on Hurlburt Field were some of the organizations that had a hand in getting Airman Hicks back on her feet and into her new home,” said Mr. Timothy Gunnison, 46th OSS airfield manager.

### The call goes out

“The first sergeants sent out the call for help and the message reached almost everyone in an amazingly short time,” Sgt. Braswell said. “The ‘Team’ in Team Eglin was a tremendous thing to see rally when one of its own needed help. The response from the entire base made a huge impact in this young family’s life, and I’m extremely proud to be a member of such a team and the Air Force.”

Airman Hicks and her family are now in their new house in base housing and getting adjusted to their new outlook on life.

### A new outlook

“My family and I will pay more attention to detail and also love and appreciate what we have today and don’t worry about tomorrow or yesterday,” she said.

Airman Hicks stressed the importance of loving life, family and friends because, she said, “You never know when it will all be taken away from you.”

— Airman 1st Class Sarah Busch, AAC/Public Affairs



### AF’s first woman gunner

KIRTLAND AIR FORCE BASE, N.M. — Airman Vanessa Dobos, 58th Training Squadron, recently graduated from her technical school here as the Air Force’s first female aerial gunner. As a gunner and member of a search and rescue crew on the H-60 helicopter, she’ll perform combat duty that was formerly closed to women in the Air Force.

Airman Dobos said she follows the philosophy an instructor told her, “A gunner’s a gunner, don’t think you’re special because you’re a female.” She has arrived at her first duty station, Nellis AFB, Nev.

— Reported by AFRL Public Affairs

### Results posted for fifth Air Force Marathon

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — More than 3,200 runners from 48 American states and eight foreign countries ran in the fifth Air Force Marathon here Sept. 29.

Wheelchair competitors began the 26.2-mile race at 7 a.m., pursued by individual runners at 7:05 a.m., and relay teams at 7:30 a.m.

**Mr. Patrick Doak** of Alpharetta, Ga., was the first male wheelchair competitor to cross the finish line, with winning time of 1 hour, 59 minutes and 47 seconds.

**Ms. Holly Koester** of Cleveland, Ohio, was first-place female wheelchair competitor with winning time of 3 hours, one minute, and 42 seconds.

The individual overall male winner was Air Force **Staff Sgt. Jeffrey S. Gibson** of RAF Mildenhall, United Kingdom, with a time of 2 hours, 42 minutes and 15 seconds. The individual overall female winner was **Ms. Sandy Hundley** of Hilliard, Ohio, with a time of 3 hours, 16 minutes and 41 seconds. The first relay overall team to cross the finish line was the NG Seacows, with an elapsed time of 2 hours, 26 minutes and 17 seconds.

Final race results are posted at <http://afmarathon.wpafb.af.mil/>. The sixth Air Force Marathon is scheduled to take place Sept. 20, 2003.

— Reported by ASC Public Affairs

### AFRL awards innovative research contract

ROME, N.Y. — The Air Force Research Laboratory Information Directorate has awarded a \$97,800 contract to Cymfony Inc. located in the Buffalo suburb of Williamsville.

The nine-month award, “Fusion of Information from Diverse, Textual Media: A Case Restoration Approach,” was awarded under the government’s small business innovative research program.

“Company engineers will investigate the development of software tools and techniques to combine information extraction with fusion technology,” said Mr. Paul Engelhart, program manager in the directorate’s Information and Intelligence Exploitation Division.

— Reported by AFRL Public Affairs

### Test Pilot School updates admission requirements

EDWARDS AIR FORCE BASE, Calif. — Pilots, engineers and navigators applying for slots at the U.S. Air Force Test Pilot School are finding some of the school’s requirements have changed. The biggest difference for applicants comes in the experience requirements for pilots and navigators.

Currently, pilots wishing to apply must have served at least 12 months as an aircraft commander in a major weapon system — down from 18 months in past

years. Pilots must also be qualified instructor pilots in a major weapon system or have at least 750 hours total time — down from 1,000 hours previously.

Navigators interested in the school must be qualified instructor navigators in a major weapon system or have at least 500 hours total in the system. This experience requirement is now the same for both fighter and bomber navigators.

Aircraft maintenance and space operations are two of the career fields that test and evaluation leadership is considering adding to the school’s list of eligible AFSCs. The school is also developing short courses geared for each. For more information on the school or applying for its July 2003 and January 2004 classes, visit <http://www.edwards.af.mil/tps>.

— Reported by AFRL Public Affairs

### AFRL holds annual research workshop

ROME, N.Y. — The Air Force Research Laboratory Information Directorate conducted a digital forensic research workshop recently at Syracuse University. It was the second in an ongoing series of annual workshops to define, focus and clarify research activities needed to enhance the evolving field of digital forensics. Approximately 100 participants from government, academia, law enforcement and industry included representatives from Australia, Canada, Italy, Scotland and the United States.

Dr. Penrose Albright, senior director for research and development at the White House Office of Homeland Security provided a keynote address detailing OHS plans to build a research laboratory drawn from national laboratories to address future homeland security technology needs. He also commended the workshop’s ground rules that called for forensic research scientifically based and unconstrained by current practices, policies and laws.

Based on the success of this year’s workshop, a number of organizations have already volunteered to co-sponsor the workshop in 2003. The final workshop report is available at <http://www.dfrws.org>.

— Reported by AFRL Public Affairs

# Safety comes first for JSF test team



With planning for the Joint Strike Fighter flight test program in high gear, experts at the JSF Integrated Test Force at Edwards Air Force Base, Calif., are focusing on the high-tech safety designs the new fighter will offer future aircrews.

Both the Air Force and the Navy will conduct testing on all of the JSF variants, including the Air Force, Navy and Marine versions as well as the foreign version of the aircraft. Once test pilots begin evaluating the JSF in the sky, they will be looking at several key features that have been designed specifically for its pilots and ground crews.

## Relating key information

According to Mr. Mark Crawford, chief engineer for JSF at Edwards, the fighter's most unique safety characteristic is its prognostic health management system, which begins working before the aircraft returns from a mission.

With this system, the aircraft will relay key maintenance information to a ground support system allowing the logistics community to assemble the right skills, technical data and aircraft spares needed to quickly return the jet to the air.

He notes that if a system, such as the aircraft's radar capability, were to fail or sustain battle damage, the health management technology would signal an in-flight reconfiguration thus allowing the pilot to link to a wingman's radar system to complete the mission. The reliability and fault-isolation data offered by the system will also help maintenance crews identify when the aircraft are meeting mission and reconfiguration requirements.

"This will lead to reduced maintenance and supply cycle time and will make the most of our logistics resources," said Mr. Crawford.

## An added bonus

In addition, the fighter's ground collision avoidance system has been developed to assist a pilot in a situation where he or she might be task-saturated or temporarily incapacitated. If such a situation arises, the aircraft will automatically maneuver to avoid hitting terrain or obstacles.

The system uses digitally stored databases including one containing terrain representative data to predict when a collision with the ground is imminent. A fly-up is commanded prior to impact signaling the flight controls to execute an automatic fly-up. The mission computer terrain database can be updated flight to flight to support the current mission plan.

The new fighter also represents a significant step forward in safety of short takeoff and vertical landing, or STOVL, operations as compared to legacy aircraft such as the British Harrier series aircraft.

The JSF flight control system will take inputs from the pilot and through its sophisticated software algorithms will determine the safest and most effective method to accomplish the pilot's desired task. The computer system will also correct for environmental and other external influences on the aircraft including wind and ship movement to safely land the F-35 on a carrier deck.

"In the older legacy STOVL systems the pilots had to account for all of these influences, which significantly drove up their workload and led to a higher mishap

rate over the lifecycle of those aircraft," Mr. Crawford said.

According to Mr. Joe Dowden, director of the JSF test force at Edwards, the team is relying on lessons learned from the fighter's concept demonstration phase, which ended last October with the Defense Department's decision to safely develop the JSF. Communicating across three time zones with their Navy test counterparts in Maryland and the JSF Joint Program office in Washington, D.C., can be challenging, he said.

"If we say black, we perceive what we believe to be the color black but another service might perceive it differently," Mr. Dowden said. "We have to work very hard to understand each others' terms and make sure we have a clear meeting of the minds in every step we take."

## Their biggest customer

In all, the joint JSF flight test program will conduct an estimated 11,000 flight test hours before turning the aircraft over to those who will fly it into combat. The first test aircraft is expected to touch down at Edwards for developmental testing in 2005. An additional 18 are expected to arrive once the program moves into operational testing in 2010.

Once the JSF moves into production, the Air Force will be its largest customer, with current plans to purchase around 2000 of the conventional takeoff and landing version of the aircraft, designed primarily for air-to-ground combat and to replace the F-16 and A-10 and to complement the F/A-22.

— Ms. Leigh Anne Bierstine, AFFTC Public Affairs

# Air Force announces depot strategy

Air Force officials recently announced their Depot Maintenance Strategy and Master Plan for the years 2004-2020, charting a new course for how the service's three air logistics centers will support America's warfighters.

The strategy calls for increased investment in both the depot infrastructure and the organic depot workforce, increased reliance on public-private partnering and process improvements in depot business practices.

The strategy's goals are for the Air Force to maintain a highly qualified depot workforce, get aircraft through the depot process quicker with increased quality, obtain a properly sized infrastructure, reduce cost and improve financial management.

## Looking ahead

"During the past 10 years, the Air Force has not invested adequately in maintaining the basic infrastructure of the depots: the physical facilities, machinery, equipment, training and development of its personnel," said Mr. Nelson Gibbs, assistant secretary of the Air Force for installations, environment and logistics.

"So, they have not kept pace with advances that occurred in the commercial sector of the business," he said.

Long-range depot strategy will help rectify the situation, said Gen. Lester Lyles, Air Force Materiel Command commander. "The strategy is a means to focus the Air Force and Air Force Materiel Command on how to retain these as viable depots and effectively and efficiently support the warfighter," he said.

Under the strategy, workload for the Air Force's depots — at Robins Air Force Base, Ga.; Tinker AFB, Okla.; and Hill AFB, Utah, — will include core workload and core-plus workload.

Core is work which must be maintained in Air Force depots to meet readiness and sustainability requirements of contingency

scenarios. Core-plus is additional workload needed to make the depots more efficient and effective.

## Partnering with industry

The strategy also calls for increased partnering with industry to use the capabilities of both the public and private sectors to take advantage of what each does best. This approach, when well planned and properly leveraged, offers the Air Force improved lifetime performance and sustainment, according to strategy experts.

"The direction the Air Force is headed is to partner with industry to provide the best, most reliable service at the cheapest cost, and we need both the depots and industry to be able to do that more effectively from a financial point of view," Mr. Gibbs said. "We want to minimize the duplication and redundancies, so the strategy we're following is to encourage more depot-industry partnerships."

The strategy also incorporates the ongoing Depot Maintenance Reengineering and Transformation effort. This has already resulted in a single organization being created at each air logistics center, focused solely on depot-level maintenance.

When asked what differences the operational commands will see 10 years from now, Mr. Gibbs said, "They'll say, '10 years ago when we used to send these things in, we'd get them back 270 days later. Now, we get them back in 140 days and have less squawks when we get them back."

"It's really a pleasure to do business with these guys now. We can rely on them, they give us a quality product on the date they said we were going to get it," Mr. Gibbs said. "If they can say that, then we will have achieved a primary goal."

— Technical Sgt. Carl Norman, AFMC Public Affairs



Workers at the Ogden Air Logistics Center, Hill AFB, Utah. (Courtesy photo)

# E-tools 'home on the range' for rodeo events



Instead of bulls, broncos and clowns, participants in a recent rodeo held at Nellis Air Force Base, Nev., "corralled" laptop and handheld computers, personal digital devices and tablet personal computers.

Arranged by the Standard Systems Group, Maxwell AFB, Gunter Annex, Ala., the E-Tools rodeo was designed to test the usability of various devices under varying conditions.

"We loaded maintenance software on various devices from different vendors and then had maintenance troops test them for ease of use and readability," said Master Sgt. Michael Rourke, SSG point of maintenance project manager.

## Qualifying

An E-Tool is any electronic piece of equipment that can be used to access and view technical data or collect and display transaction data while workers or technicians do their jobs.

"This test is our first scientific attempt to come up with data to determine the

range of E-Tools," said Maj. Rene Leon, a logistics information systems manager at Headquarters Air Force, Installations and Logistics.

"Using E-Tools should make it easier for the maintainer to access or input data while doing the work at their point of maintenance," she said.

The Air Force Research Laboratory and the University of Dayton Research Institute developed sample maintenance open work order tasks for each participant to follow. The maintenance troops had to repeat the same tasks in chemical resistant gear prior to answering a questionnaire.

Staff Sgt. Charles Flood, a back shop armament specialist with the 57th Equipment Maintenance Squadron, was impressed with the E-Tools he tested. "By using E-Tools, we won't have to run to the office all the time; we'll have the data right at our fingertips," he said.

## It takes time

Currently most maintainers must finish

the job before going back to the office to input the work order documentation.

That process sometimes takes time, said Staff Sgt. Charles Proctor, an F-15E crew chief. "We either have to stop what we're doing, find an open terminal and log in, then enter the data or finish the job and find the time later to enter it. These tools should definitely speed up the process."

Following the test, the researchers will take a look at the participant's overall impressions and feedback about the strengths and weaknesses of each device.

## No winners or losers

"It's important to understand that this was not a competition between vendors and devices," Sgt. Rourke said. "Users will choose which device they would like to use based on their own criteria."

"We'll eventually develop a matrix listing a set of Air Force approved E-tools," Maj. Leon said. "This test was just one baby step toward that end product."

— Ms. Belinda Bazinet, SSG Public Affairs



*A B-1B Lancer recently arrived for display at the U.S. Air Force Museum at Wright-Patterson AFB, Ohio. This is a Lancer performing a recent fly-by for troops in Operation Enduring Freedom. (Air Force photo by Senior Airman Rebecca Luquin)*

## Lancer finds home at USAF Museum

An aircraft commonly identified as the backbone of America's long-range bomber force and a vital enabler of U.S. global power projection recently found a new home at the U.S. Air Force Museum, Wright-Patterson Air Force Base, Ohio, when a B-1B landed on a runway behind the museum.

Flown in directly from the 7th Bomb Wing at Dyess AFB, Texas, the B-1B is the latest addition to the museum's expanding aircraft collection. The aircraft the museum received has been retired from active flying status after 16 years of service.

Museum restoration staff members will prepare the aircraft for public display before placing the bomber in the museum's new 200,000 square-foot third hangar currently under construction and scheduled to open in spring 2003.

"The B-1B will replace our B-1A currently on display in our airpark," said Maj. Gen. (Ret) Charles Metcalf, museum director. "It's really special to get this particular B-1B as it has an extensive operational background whereas our B-1A was a test aircraft."

Designated tail number 84-0051, the museum's B-1B came to Dyess on July 9, 1986. During its service life, the aircraft flew primarily training missions, recording 4,882 flight hours during 1,071 sorties and earned the distinction of being the first B-1B to reach 2,000 flying hours.

Also known as the "Lancer" and the "Bone," the B-1B provides massive and rapid weapons delivery against targets anywhere on the globe. Its blended wing and body configuration and turbofan engines furnish the bomber greater range and high speed with enhanced survivability against sophisticated enemy air defenses.

The Lancer's speed, maneuverability and large payload make it a critical component of any joint/composite strike force.

An important weapon platform in America's war on terrorism, the B-1B has been employed extensively as part of Operation Enduring Freedom, bombing key Taliban targets and cave networks in Afghanistan.

— Mr. Chris McGee, U.S. Air Force Museum Public Affairs

## Museum taking first steps toward major gallery revamping

The Air Force's national museum has launched a major revamping of its gallery layout as a critical prelude to realizing its expansion vision.

The U.S. Air Force Museum has begun the process of removing exhibit walls and taking down exhibits from various areas, clearing the way for a move of aircraft this fall in accord with a comprehensive museum master plan establishing a reconfigured exhibit chronology throughout the museum.

Workers have taken down exhibit walls in the Air Power Gallery and are preparing to move a number of aircraft outside

temporarily in order to move the massive B-36 into the new 200,000-square-foot hangar, currently under construction and scheduled to open in spring 2003.

Although the activity will lead to temporary closure of affected areas in some cases, the end result will be an expanded, improved museum with greater chronological cohesion, according to Maj. Gen. (Ret) Charles Metcalf, museum director.

The centerpiece of the museum's expansion, the third hangar will be called the Eugene W. Kettering Gallery in honor of the first head of the Air Force Museum Foundation Board of Trustees. Follow-on

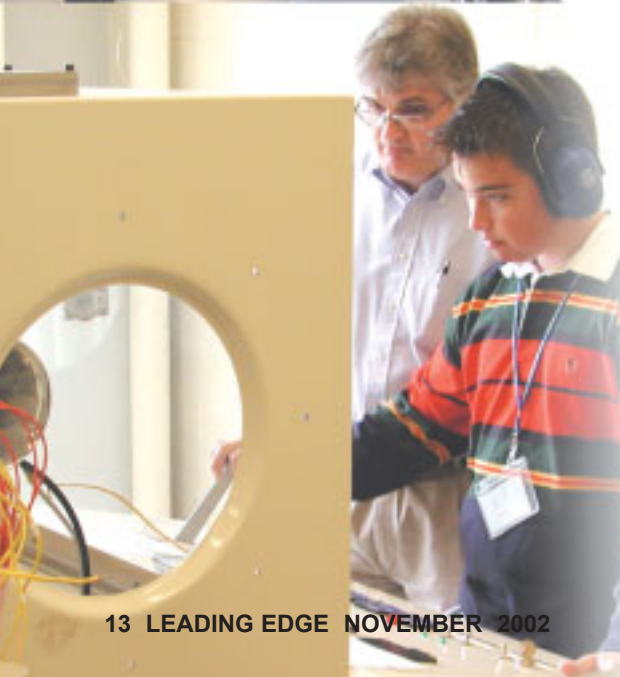
expansion phases include a hall of missiles, a stand-alone and expanded space gallery and an education center.

The B-36 will find a new home in the new hangar, which the museum will use to portray more intimately the story of the Cold War and beyond and the revolutionary military, technological and geopolitical developments the era yielded.

For more detailed information on items affected by gallery movement, visit the museum's Web site at [www.wpafb.af.mil/museum/](http://www.wpafb.af.mil/museum/).

— Mr. Chris McGee, U.S. Air Force Museum Public Affairs

# Wright Scholar program develops future AF scientists & engineers



While most of their friends were flipping burgers at the local fast food joint or just hanging out at the mall this summer, a select group of promising young scientists were experimenting with their future as research assistants in the Air Force Research Laboratory at Wright-Patterson Air Force Base, Ohio.

Twenty-seven "Wright Scholars" joined a team of scientist and engineer mentors in the lab's Propulsion, Air Vehicles and Human Effectiveness directorates for 10 weeks of hands-on exploration designed to "foster learning in the realm of science and engineering," said Mr. John Horner, propulsion operations division program manager.

## Applying their knowledge

The paid internship gave the selectees — from 19 different high schools — an opportunity to assist with on-site research and apply their knowledge of chemistry, physics and mathematics to various engineering careers, he said. They also participated in a jet engine propulsion course taught at the Air Force Institute of Technology and attended weekly lectures with experts who discussed propulsion and power technologies.

The lecture series was a surprising success, according to Mr. Horner. Topping the list of favorite subjects at the program's lectures were presentations on pulsed detonation engines, scramjets, optics and lasers, combustion, rockets and plasma research.

## The biggest 'payoff'

But the program's biggest payoff, according to Mr. Horner was exposing these "enthusiastic and exceptional" students to the wonders of hands-on research.

"I co-op'd in college when I was studying to become a mechanical engineer at the University of Akron

and it was a wonderful experience," he said. "I worked in the B.F. Goodrich research lab and factory. I actually designed tires. Through that experience I realized what a valuable program any kind of internship program is, and I tried to develop similar programs in this directorate."

When given the challenge to establish a work program that would show top high school students what engineering is all about, Mr. Horner knew he wanted to give today's youth the same hands-on experience he benefited from. "We also wanted to give them a chance to explore some of the career opportunities the Air Force has to offer," he said.

For 10 weeks the scientists-in-training joined forces with their assigned mentors to conduct individual research projects involving such esoteric issues as three-dimensional modeling of turbine engines, fuel composition analysis and hydrocarbon-fueled supersonic combustion engines. Other topics included studies in jet engine aerodynamics and combustion science.

## Benefiting the future

Ultimately, Mr. Horner and his team of scientists and engineers are hopeful the Wright Scholar program and others like it will generate a pool of highly qualified individuals the Air Force can draw on to fill looming critical shortages of scientists and engineers.

Of the Air Force's 13,300 military and civilian scientist and engineer authorizations, the service is short approximately 2,700 — or about 20 percent, according to Air Force Materiel Command personnel officials. And that's if they only had to fill current vacancies, not expected future shortages, they said.

"We're an aging workforce and a significant number of our scientists and engineers will be eligible for retirement in the next five years," Mr.

Horner said. "That's what really motivated us in this program and other summer intern programs."

## The next generation

Senior leadership across AFRL and AFMC has seen the wisdom in that approach to developing the next generation of scientists and engineers and fully support the concept, according to Mr. Horner.

"We truly believe that any effort to develop future scientists and engineers will pay big dividends toward our own future, and to that of the Air Force," said Col. Alan Janiszewski, AFRL propulsion director.

Mr. Horner and his team of mentors hope to make that a reality with efforts like the Wright Scholar program.

"You hear all the negatives in the news about our nation's troubled youth. It's refreshing to see these young kids — who essentially are going to play a major role in the workforce over the next 10 years — so intellectually smart and mature at this point in their lives," Mr. Horner said.

"I feel like I'm impacting lives," he said. "Hopefully, these kids' lives will be changed through this experience — a whole different career path perhaps."

Judging from the number of students eager to return next year, Mr. Horner has been able to generate some hope for the command's future science and engineering workforce.

Twenty of the 22 juniors who participated are returning next year to continue their research and pursue a possible career as an Air Force scientist or engineer. The five seniors going off to college will be invited to apply and take advantage of summer internships in the lab. All are hoping to return, Mr. Horner said.

— Mr. Michael Kelly, AFRL Propulsion Directorate

## Program gives students focus for future

The Wright Scholar program taps into young talent with an eye to the future. Sixteen-year-old Andrew Mizner, a sophomore at Lehman Catholic High School in Sidney, Ohio, throws out scientific terminology with aplomb as he waves his pointer toward the screen behind him, which features a PowerPoint presentation describing his summer project — "What I did on my summer vacation, or, why not to work at McDonalds."

The energetic young man with closely-cropped hair and thick glasses peppers his speech with engineering concepts on "exploratory and advanced development in aerodynamic configurations," while his fellow students participating in the inaugural Wright Scholar program nod appreciatively.

Passersby would be hard-pressed to tell the difference between his presentation and an Air Force Institute of Technology engineering course, but that's okay with the program's creators in the Air Force Research Laboratory's Propulsion Directorate. AFRL leaders hope to tap into the area's top high school scholars and grow them into future engineers and scientists to meet expected Air Force career field shortages in the next five to seven years. This year's crop of promising scientists and engineers included 22 students working in AFRL's propulsion directorate, four in air vehicles and one in human effectiveness.

"The most rewarding aspect of the program is the number of qualified applicants we had apply for positions," said Mr. John Horner, program coordinator. "Of the 129 who applied, I could have easily hired 100 of them, they were that good. They all had honors classes, high grade point averages and participated in meaningful extracurricular activities."

With the students returning to school, Mr. Horner couldn't be happier with the pilot program's impact. "The feedback I've received from their mentors is that they're all outstanding — willing to learn, to contribute and bring in new ideas on something we hadn't thought about."

In fact, one Wright Scholar showed up for work and was disappointed when a research test had to be delayed because of a



Mr. Matt Mullins, an 18-year-old Wright Scholar, spent his summer helping run tests for the pulsed-detonation engine program and acquiring, analyzing and storing test data for future reference. (Air Force photo by Mr. Bill McCuddy)

broken intercom system in the test facility. "He said, 'I can fix that!' and he did. He fixed it that afternoon," he said. "It was pretty amazing to see the talent and the skills these kids have at that level."

According to Mr. Horner, 20 of the 22 juniors who participated are returning next year because of their positive experience.

Mr. Matt Sterling, an 18-year-old from Waynesville, is a convert to a career in science and engineering. A new senior at Cranbrook-Kingswood Upper School in Bloomfield Hills, Mich., he got a crash course this summer in combustion, mass flow and molar fractions — and loved it.

"My experience with the machinery and the lab work was great," he said. "I definitely want to go into the engineering field and the Wright Scholar program gave me a taste of what it would be like."

Mr. Matthew Mullins, an 18-year-old from Englewood, called the Wright Scholar program his "summer of opportunity. I thought it was an invaluable chance to preview job roles and work place situations."

That's music to the ears of Mr. Horner who is looking ahead to next year's efforts.

"The Air Vehicles Directorate has already asked for an additional four students next year. It's a lot of work, but I'd like to expand the program next year. To see a kid come by with a smile on his face saying 'This is the best job I've ever had in my life,' is very rewarding."

— Mr. Michael Kelly, AFRL Propulsion Directorate

**Top photo:** Mr. Joe Miller and Mr. Matt Mullins, participants in the Wright Scholar program, worked closely with AFRL scientists and engineers. **Middle:** Capt. Colin Tucker instructs the students on the basics of jet engine mechanics. **Bottom:** Dr. Paul King, associate professor at AFIT, keeps a watchful eye on Mr. Casey Holycross as he runs up a turbojet engine in a propulsor test cell.



**Tech. Sgt. Thomas Fields, Edwards AFB, Calif., received the 2001 Cheney Award.** (Photo by Mr. Thomas Powell)

## Lifesaving loadmaster receives Air Force award

EDWARDS AIR FORCE BASE, Calif. — A C-17 loadmaster here received the 2001 Cheney Award from Chief of Staff of the Air Force Gen. John Jumper in a ceremony at the Pentagon Aug. 20.

Tech. Sgt. Thomas Fields, the non-commissioned officer in charge of standardization and evaluation for the 418th Flight Test Squadron at Edwards, saved the life of a fellow loadmaster during a test flight in January 2001.

While flying at an altitude of 1,200 feet, one of the loadmasters reached up to close the door and his parachute inadvertently opened. If the parachute had gone out the door, the loadmaster would have slammed up against the side of the aircraft making it unlikely he would survive.

Sgt. Fields noticed a piece of equip-

ment wrapped around the rip cord and grabbed the deployed parachute, wrapping his body around it and the loadmaster, preventing it from pulling the loadmaster out of the aircraft. He pulled him away from the door as another loadmaster closed it.

Gen. Jumper called Sgt. Fields a hero. The sergeant said his actions were something anyone would have done, and called the award a highlight of his career.

The Cheney Award was created in memory of 1st Lt. William Cheney, who was killed in an aircraft training accident in Foggia, Italy, in 1918. The award recognizes an act of valor, extreme fortitude or self-sacrifice in connection with an aviation event.

— Reported by AFFTC Public Affairs

## ACS names AFRL scientist 2003 award recipient

EDWARDS AIR FORCE BASE, Calif. — Dr. Karl Christe has been named the recipient of the American Chemical Society's 2003 Inorganic Chemistry Award.

Dr. Christe is an inorganic research chemist and Senior Staff Advisor at the Air Force Research Laboratory's Edwards Research Site where he helps lead efforts on promising High Energy Density Matter chemistry. Those AFRL Propulsion Directorate efforts are supported by the Air Force Office of Scientific Research and Defense Advanced Research Projects Agency, or DARPA.

Since 1998, Aldrich Chemical Co. Inc. has sponsored the ACS Inorganic Chemistry Award. Dr. Christe's award will be presented on March 25, 2003, at the 225th ACS National Meeting in New Orleans.

Dr. Christe was nominated for the award based on his lifetime achievements in chemistry.

Some of Dr. Christe's newest work,

"An Aromatic Ring of Five Nitrogens," was featured as "News of the Week" in a recent edition of *Chemical and Engineering News*, the official publication of the American Chemical Society.

— Reported by AFRL Public Affairs

## AFRL scientist honored by SME College of Fellows

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — An Air Force Research Laboratory Materials and Manufacturing Directorate scientist was recently selected as a Society of Manufacturing Engineers Fellow for his outstanding contributions to the field of manufacturing.

Dr. John Maguire, a research leader and principal engineer for the directorate's manufacturing technology division materials process design branch, will be inducted into the SME College of Fellows during the SME Fall Board Meeting Nov. 11. Less than .5 percent of of SME's 50,000 members are honored with Fellow status.

In his current position as a materials research leader and principal engineer, he

has contributed to soft and interfacial matter research, and developed material processing and techniques in computer simulation and molecular dynamics.

His discoveries in the area of soft, interfacial, granular and nanomaterials could provide new forms of matter with engineered properties and controlled structures.

As a result of his pioneering work that has led to breakthroughs in the field of computer modeling and simulation, major intelligent computer control systems were developed and transitioned to Texas Instruments and Rohr Industries.

He has also worked to calculate collision dynamics for complex objects, which had never before been done in the statistical physics field, and could revolutionize the field of process control.

A fellow of SME is a member recognized by the manufacturing community as a contributor to the social, technological and educational aspects of the profession. Dr. Maguire is one of only four members who will receive the honor this year.

— Reported by AFRL Public Affairs

## AFRL/PR Chief Scientist named AIAA Fellow

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — Dr. Alan Garscadden, chief scientist in the Air Force Research Laboratory's Propulsion Directorate, was recently named an American Institute of Aeronautics and Astronautics Fellow for 2002.

AIAA is the world's largest professional society devoted to the progress of engineering and science in aviation, space and defense. AIAA Fellows are honored for making notable contributions to the arts, sciences or technology of aeronautics or astronautics, said institute officials. They are part of a select group, since only one fellow is elected each year for every 1,000 voting members of AIAA.

Dr. Garscadden serves as technical adviser on a wide spectrum of aeronautical research, including many facets of propulsion, aerospace power, hypersonics, laser physics, combustion and plasma phenomena and applications.

He is known for his work in theoretical and experimental research in plasmas and energized gas flows, lasers, laser-based measurements, plasma-processing of thin films, optical and mass spectroscopic measurements, electron impact cross sections and their influence on electron transport, and the derivation of collision cross sections from transport data.

— Reported by AFRL Public Affairs

## Hanscom worker garners VFW national honor

HANSCOM AIR FORCE BASE, Mass. — Veterans of Foreign Wars of the United States officials recently anointed the Hanscom Boys and Girls Club of America program director for youth services here as an All-American Post Commander.

Mr. Charles Cofield received the honor at the VFW's 103rd annual national convention in Nashville, Tenn. According to Mr. James Goldsmith, VFW commander in chief, Mr. Cofield is one of 87 VFW post commanders worldwide being recog-

nized with this honor.

The honor's criteria is based on outstanding achievement in membership growth, fundraisers and participation in other VFW programs that benefit veterans and their communities.

The VFW assists all veterans and their families in obtaining veterans entitlements and other services. The organization also works toward the well being of those serving the military on active duty, or in the National Guard or Reserve.

Mr. Cofield, who arrived at Hanscom July 15, was the commander for VFW Post 10810 in Stuttgart, Germany. He held that position since 2001.

The VFW was founded in 1899 and has 1.9 million members located in nearly 9,500 posts worldwide.

— Reported by ESC Public Affairs

## Teleconferencing IDEA earns employee \$10,000

ROME, N.Y. — A suggestion to change the way in which video teleconferencing is provided has earned an Air Force Research Laboratory employee here a \$10,000 award from the Air Force Innovative Development through Employee Awareness program.

Mr. Gregory Howe, a telecommunications specialist in the AFRL Information Directorate's Communications and Computers branch, will receive the award for his proposal to use new AFRL Rome research site switching capabilities to connect its teleconferencing facility. The switch was installed in December.

The teleconference facility has been utilizing a dedicated circuit provided by AT&T. By installing interface cards in the new communications switch, more than \$7,000 in monthly charges for the dedicated circuit were eliminated.

The new process requires only the cost of long distance calling; however, since most of the site's video teleconferencing involves military bases, those calls can be made without charge via the Defense Switching Network.

After deducting the cost of new interface cards for the telephone switch, the Rome research site anticipates saving

more than \$75,000 during the first year. Savings in subsequent years are estimated at more than \$83,000 annually.

— Reported by AFRL Public Affairs

## AFRL scientists, engineers named new fellows

WRIGHT-PATTERSON AIR FORCE BASE, Ohio — The Air Force Research Laboratory has announced the selection of five scientists and engineers as AFRL fellows.

The program is designed to recognize and reward the laboratory's most outstanding in-house scientists and engineers for their accomplishments and technical excellence. Each fellow receives a \$100,000 grant for the first two years following selection.

This year's honorees are:

**Mr. William Blumberg**, Space Vehicles Directorate, Hanscom Air Force Base, Mass., is being recognized for augmenting the understanding of infrared background signatures and their effects on surveillance systems.

**Mr. William Copenhaver**, Propulsion Directorate, Wright-Patterson AFB, Ohio, is being recognized for his expertise in the area of compression system aerodynamics.

**Ms. Kueichien Hill**, Sensors Directorate, Wright-Patterson, is renowned for her work in computational electromagnetics.

**Mr. Paul McManamon**, Sensors Directorate, Wright-Patterson, is a leader in electro-optical systems and is being recognized for his work in optical phased arrays and laser flash imaging.

**Mr. Robert Peterkin**, Directed Energy Directorate, Kirtland AFB, N.M., whose research in computational plasma physics for states of geometric complexity has significantly advanced the development of high power microwave systems.

— Reported by AFRL Public Affairs